



12/29/2017

Attn: Mr. Marshall Green
Quick Mount PV
2700 Mitchell Dr.
Walnut Creek, CA, 94598

RE: Quick Mount PV QHook Mount System for use with
IronRidge XR10 Roof Flush Mount System

SEI Project No.: 17054.00

Dear Mr. Green

Structural Enginuity Inc. (SEI) has completed its review of the Quickmount PV QHook Mount System for use in conjunction with the IronRidge XR10 Rail, Roof Flush Mount System. The QHook product line includes the Quick Hook for Side Mount Rails (QMHSS & QMHLS) mounts.

The review was based on the following reference data:

- Starling Madison Lofquist, Inc., IronRidge XR10 Rail, Roof Flush Mounting System – Structural Analysis, March 14, 2016
- Applied Materials & Engineering, Laboratory Load Test of the QMHSS with 6061 Base Plate, Project Number 114490C, March 18, 2015
- Applied Materials & Engineering, Laboratory Load Test of the QMHLS with 6061 Base Plate, Project Number 114490C, March 10, 2015
- Structural Enginuity, Inc., Quick Mount PV Quick Hook Compliance Letter, Project Number 16054.00, October 16, 2017

SEI has determined that the QHook Mount is suitable for use with the IronRidge XR10 Rail, Roof Flush Mount System. The approved installation and allowable loads for the Quick Mount PV QHook products is outlined in the Structural Enginuity, Inc. letters referenced above. The allowable load values are shown below, no additional load duration factors may be applied to these values.

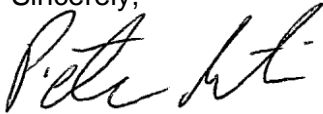
Table 1: QHook Allowable Loads

Load Direction	Mount Type	Allowable Load
Uplift	QMHSS	506 lb.
	QMHLs	418 lb.
Lateral	QMHSS	367 lb.
	QMHLs	323 lb.
Compression	QMHSS	378 lb.
	QMHLs	338 lb.

SEI has prepared allowable rail span charts for the IronRidge XR10 Rail System used in conjunction with the Quick Mount PV QHook products. These span tables serve as a quick reference for looking up maximum rail spans based on building and site conditions and follow the 2016 CBC, 2015 IBC/IRC and applicable ASCE 7-10 load cases. The tables take into account the strength of the rail system as well as the allowable tension, compression, and lateral forces of the QHook Mount. A site specific analysis is required if the site conditions or building characteristics do not meet the requirements listed in the attached tables. In all cases, the tables are meant to be used in conjunction with IronRidge XR10 Structural Report and Calculations and all requirements listed are still applicable for these tables including edge zones and edge distances.

Please contact our office if you have any further questions relating to this matter.

Sincerely,



Peter Martin
Engineer II
pmartin@structuralenginuityinc.com



Allan T. Myket, P.E.
President/Founder
amyket@structuralenginuityinc.com



12/29/2017

Structural Enginuity Inc.

Rail Spans for IronRidge Series XR10 Roof Mount for use with QMHSS Products

Table 1A		Roof Height: 0-30 ft		Panel Orientation: Portrait							
		Roof Angle: $7 < \theta \leq 27$ degrees									
		Roof Wind Zone: 1									
XR10 Rail	Wind Speed	Ground Snow Load									
Exposure	mph	0 psf	10 psf	20 psf	30 psf	40 psf	50 psf	60 psf	70 psf	80 psf	90 psf
Category B	100	75	65	55	49	43	37	32	28	25	22
	105	75	65	55	49	43	37	31	28	24	22
	110	75	65	55	49	43	36	31	27	24	22
	120	75	65	55	49	43	36	31	27	24	22
	130	75	65	55	49	42	35	30	27	24	21
	140	71	65	55	49	41	34	30	26	23	21
	150	66	65	55	48	40	34	29	26	23	21
	160	62	62	54	47	39	33	29	25	23	21
Category C	100	75	65	55	49	43	37	32	28	25	22
	105	75	65	55	49	43	37	31	28	24	22
	110	75	65	55	49	43	36	31	27	24	22
	120	70	65	55	49	43	36	31	27	24	22
	130	65	64	54	48	42	35	30	27	24	21
	140	60	60	53	48	41	34	30	26	23	21
	150	56	56	52	47	40	34	29	26	23	21
	160	53	53	51	46	39	33	29	25	23	21
Category D	100	75	65	55	49	43	37	32	28	25	22
	105	73	65	55	49	43	37	31	28	24	22
	110	70	65	55	49	43	36	31	27	24	22
	120	64	64	54	48	43	36	31	27	24	22
	130	60	60	53	47	42	35	30	27	24	21
	140	55	55	52	46	41	34	30	26	23	21
	150	52	52	50	46	40	34	29	26	23	21
	160	49	49	49	45	39	33	29	25	23	21
170	46	46	46	44	38	32	28	25	22	20	

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable tension, compression, and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67.5"

Rail Spans for IronRidge Series XR10 Roof Mount for use with QMHLS Products

Table 1B		Roof Height:	0-30 ft		Panel Orientation:	Portrait					
		Roof Angle:	7 < θ ≤ 27		degrees						
		Roof Wind Zone:	1								
XR10 Rail	Wind Speed	Ground Snow Load									
Exposure	mph	0 psf	10 psf	20 psf	30 psf	40 psf	50 psf	60 psf	70 psf	80 psf	90 psf
Category B	100	75	65	55	49	40	33	28	25	22	20
	105	75	65	55	49	39	33	28	25	22	20
	110	75	65	55	48	39	32	28	24	22	20
	120	75	65	55	47	38	32	27	24	22	19
	130	75	65	55	46	37	31	27	24	21	19
	140	71	65	55	44	36	31	27	23	21	19
	150	66	65	55	43	35	30	26	23	21	19
	160	62	62	53	42	35	29	26	23	20	18
Category C	100	75	65	55	49	40	33	28	25	22	20
	105	75	65	55	49	39	33	28	25	22	20
	110	75	65	55	48	39	32	28	24	22	20
	120	70	65	55	47	38	32	27	24	22	19
	130	65	64	54	46	37	31	27	24	21	19
	140	60	60	53	44	36	31	27	23	21	19
	150	56	56	52	43	35	30	26	23	21	19
	160	53	53	51	42	35	29	26	23	20	18
Category D	100	75	65	55	49	40	33	28	25	22	20
	105	73	65	55	49	39	33	28	25	22	20
	110	70	65	55	48	39	32	28	24	22	20
	120	64	64	54	47	38	32	27	24	22	19
	130	60	60	53	46	37	31	27	24	21	19
	140	55	55	52	44	36	31	27	23	21	19
	150	52	52	50	43	35	30	26	23	21	19
	160	49	49	49	42	35	29	26	23	20	18
170	46	46	46	40	34	29	25	22	20	18	

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable tension, compression, and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67.5"

Rail Spans for IronRidge Series XR10 Roof Mount for use with QMHSS Products

Table 2A		Roof Height:	0-30 ft		Panel Orientation:	Portrait					
		Roof Angle:	7 < θ ≤ 27		degrees						
		Roof Wind Zone:	2								
XR10 Rail	Wind Speed	Ground Snow Load									
Exposure	mph	0 psf	10 psf	20 psf	30 psf	40 psf	50 psf	60 psf	70 psf	80 psf	90 psf
Category B	100	72	65	55	49	43	37	32	28	25	22
	105	69	65	55	49	43	37	31	28	24	22
	110	66	65	55	49	43	36	31	27	24	22
	120	60	60	55	49	43	36	31	27	24	22
	130	56	56	55	51	42	35	30	27	24	21
	140	52	52	52	49	41	34	30	26	23	21
	150	49	49	49	48	40	34	29	26	23	21
	160	46	46	46	46	39	33	29	25	23	21
Category C	100	61	61	55	49	43	36	31	27	24	22
	105	58	58	55	49	42	35	31	27	24	22
	110	56	56	55	49	42	35	30	27	24	21
	120	51	51	51	49	40	34	30	26	23	21
	130	48	48	48	48	39	33	29	26	23	21
	140	44	44	44	44	38	32	28	25	23	20
	150	41	41	41	41	37	32	28	25	22	20
	160	39	39	39	39	36	31	27	24	22	20
Category D	100	56	56	55	49	42	35	30	27	24	22
	105	54	54	54	49	41	35	30	26	24	21
	110	52	52	52	49	40	34	30	26	23	21
	120	47	47	47	47	39	33	29	26	23	21
	130	44	44	44	44	38	32	28	25	23	20
	140	41	41	41	41	37	31	27	24	22	20
	150	38	38	38	38	35	30	27	24	22	20
	160	34	34	34	34	34	29	26	23	21	19
	170	30	30	30	30	30	28	25	23	21	19

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable tension, compression, and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67.5"

Rail Spans for IronRidge Series XR10 Roof Mount for use with QMHLS Products

Table 2B		Roof Height:	0-30 ft		Panel Orientation:	Portrait					
		Roof Angle:	7 < θ ≤ 27		degrees						
		Roof Wind Zone:	2								
XR10 Rail	Wind Speed	Ground Snow Load									
Exposure	mph	0 psf	10 psf	20 psf	30 psf	40 psf	50 psf	60 psf	70 psf	80 psf	90 psf
Category B	100	72	65	55	49	40	33	28	25	22	20
	105	69	65	55	49	39	33	28	25	22	20
	110	66	65	55	48	39	32	28	24	22	20
	120	60	60	55	47	38	32	27	24	22	19
	130	56	56	55	46	37	31	27	24	21	19
	140	52	52	52	44	36	31	27	23	21	19
	150	49	49	49	43	35	30	26	23	21	19
	160	46	46	46	42	35	29	26	23	20	18
Category C	100	61	61	55	47	38	32	28	24	22	19
	105	58	58	55	46	38	32	27	24	21	19
	110	56	56	55	46	37	31	27	24	21	19
	120	51	51	51	44	36	31	26	23	21	19
	130	48	48	48	43	35	30	26	23	21	19
	140	44	44	44	41	34	29	25	22	20	18
	150	38	38	38	38	33	28	25	22	20	18
	160	33	33	33	33	32	27	24	21	19	18
Category D	100	56	56	55	46	37	31	27	24	21	19
	105	54	54	54	45	37	31	27	24	21	19
	110	52	52	52	44	36	31	27	23	21	19
	120	47	47	47	43	35	30	26	23	21	19
	130	43	43	43	41	34	29	25	22	20	18
	140	37	37	37	37	33	28	25	22	20	18
	150	32	32	32	32	31	27	24	21	19	18
	160	28	28	28	28	28	26	23	21	19	17
170	25	25	25	25	25	25	23	20	18	17	

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable tension, compression, and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67.5"

Rail Spans for IronRidge Series XR10 Roof Mount for use with QMHSS Products

Table 3A		Roof Height:	0-30 ft		Panel Orientation:	Portrait					
		Roof Angle:	7 < θ ≤ 27		degrees						
		Roof Wind Zone:	3								
XR10 Rail	Wind Speed	Ground Snow Load									
Exposure	mph	0 psf	10 psf	20 psf	30 psf	40 psf	50 psf	60 psf	70 psf	80 psf	90 psf
Category B	100	59	59	55	49	43	37	32	28	25	22
	105	56	56	55	49	43	37	31	28	24	22
	110	54	54	54	49	43	36	31	27	24	22
	120	49	49	49	49	43	36	31	27	24	22
	130	46	46	46	46	42	35	30	27	24	21
	140	42	42	42	42	41	34	30	26	23	21
	150	40	40	40	40	40	34	29	26	23	21
	160	37	37	37	37	37	33	29	25	23	21
Category C	100	50	50	50	49	43	36	31	27	24	22
	105	48	48	48	48	42	35	31	27	24	22
	110	45	45	45	45	42	35	30	27	24	21
	120	42	42	42	42	40	34	30	26	23	21
	130	39	39	39	39	39	33	29	26	23	21
	140	34	34	34	34	34	32	28	25	23	20
	150	30	30	30	30	30	30	28	25	22	20
	160	26	26	26	26	26	26	26	24	22	20
Category D	100	46	46	46	46	42	35	30	27	24	22
	105	44	44	44	44	41	35	30	26	24	21
	110	42	42	42	42	40	34	30	26	23	21
	120	38	38	38	38	38	33	29	26	23	21
	130	34	34	34	34	34	32	28	25	23	20
	140	29	29	29	29	29	29	27	24	22	20
	150	25	25	25	25	25	25	25	24	22	20
	160	22	22	22	22	22	22	22	22	21	19
170	19	19	19	19	19	19	19	19	19	19	

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable tension, compression, and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67.5"

Rail Spans for IronRidge Series XR10 Roof Mount for use with QMHLS Products

Table 3B		Roof Height:	0-30 ft		Panel Orientation:	Portrait					
		Roof Angle:	7 < θ ≤ 27		degrees						
		Roof Wind Zone:	3								
XR10 Rail	Wind Speed	Ground Snow Load									
Exposure	mph	0 psf	10 psf	20 psf	30 psf	40 psf	50 psf	60 psf	70 psf	80 psf	90 psf
Category B	100	59	59	55	49	40	33	28	25	22	20
	105	56	56	55	49	39	33	28	25	22	20
	110	54	54	54	48	39	32	28	24	22	20
	120	49	49	49	47	38	32	27	24	22	19
	130	46	46	46	46	37	31	27	24	21	19
	140	40	40	40	40	36	31	27	23	21	19
	150	35	35	35	35	35	30	26	23	21	19
	160	31	31	31	31	31	29	26	23	20	18
Category C	100	50	50	50	47	38	32	28	24	22	19
	105	48	48	48	46	38	32	27	24	21	19
	110	45	45	45	45	37	31	27	24	21	19
	120	39	39	39	39	36	31	26	23	21	19
	130	33	33	33	33	33	30	26	23	21	19
	140	28	28	28	28	28	28	25	22	20	18
	150	25	25	25	25	25	25	25	22	20	18
	160	22	22	22	22	22	22	22	21	19	18
Category D	100	46	46	46	46	37	31	27	24	21	19
	105	43	43	43	43	37	31	27	24	21	19
	110	39	39	39	39	36	31	27	23	21	19
	120	33	33	33	33	33	30	26	23	21	19
	130	28	28	28	28	28	28	25	22	20	18
	140	24	24	24	24	24	24	24	22	20	18
	150	21	21	21	21	21	21	21	21	19	18
	160	18	18	18	18	18	18	18	18	18	17
	170	16	16	16	16	16	16	16	16	16	16

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable tension, compression, and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67.5"

Rail Spans for IronRidge Series XR10 Roof Mount for use with QMHSS Products

Table 4A		Roof Height:	0-30 ft		Panel Orientation:	Portrait					
		Roof Angle:	27 < θ ≤ 45		degrees						
		Roof Wind Zone:	1								
XR10 Rail	Wind Speed	Ground Snow Load									
Exposure	mph	0 psf	10 psf	20 psf	30 psf	40 psf	50 psf	60 psf	70 psf	80 psf	90 psf
Category B	100	72	66	57	51	45	41	38	35	33	30
	105	72	66	57	51	45	41	38	35	33	30
	110	71	65	57	50	45	41	38	35	33	30
	120	67	63	55	49	45	41	38	35	32	29
	130	64	61	54	48	44	41	38	34	31	28
	140	61	59	52	47	43	40	36	33	30	27
	150	58	57	51	46	43	39	35	32	29	27
	160	55	55	49	45	42	37	33	30	28	26
Category C	100	68	63	55	50	45	41	38	35	32	29
	105	66	62	54	49	45	41	38	35	31	29
	110	64	61	54	48	44	41	38	34	31	28
	120	60	58	52	47	43	40	36	33	30	27
	130	57	56	50	46	42	38	34	31	29	26
	140	54	54	48	44	41	36	33	30	27	25
	150	51	51	47	43	38	34	31	28	26	24
	160	48	48	45	40	36	32	30	27	25	23
Category D	100	64	61	54	48	44	41	38	34	31	28
	105	62	60	53	48	44	41	37	33	30	28
	110	60	58	52	47	43	40	36	33	30	27
	120	56	56	50	46	42	38	34	31	28	26
	130	53	53	48	44	40	36	32	30	27	25
	140	50	50	46	42	38	34	31	28	26	24
	150	47	47	45	39	35	32	29	27	25	23
	160	42	42	41	37	33	30	28	25	24	22
170	38	38	38	34	31	28	26	24	23	21	

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable tension, compression, and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67.5"

Rail Spans for IronRidge Series XR10 Roof Mount for use with QMHLS Products

Table 4B		Roof Height:	0-30 ft		Panel Orientation:	Portrait					
		Roof Angle:	27 < θ ≤ 45		degrees						
		Roof Wind Zone:	1								
XR10 Rail	Wind Speed	Ground Snow Load									
Exposure	mph	0 psf	10 psf	20 psf	30 psf	40 psf	50 psf	60 psf	70 psf	80 psf	90 psf
Category B	100	72	66	57	51	45	41	37	33	30	27
	105	72	66	57	51	45	41	37	33	30	27
	110	71	65	57	50	45	41	36	32	29	27
	120	67	63	55	49	45	40	35	31	28	26
	130	64	61	54	48	43	38	34	30	28	25
	140	61	59	52	47	41	36	32	29	27	24
	150	58	57	51	45	39	35	31	28	26	24
	160	55	55	49	43	37	33	30	27	25	23
Category C	100	68	63	55	50	45	40	35	31	28	26
	105	66	62	54	49	45	39	34	31	28	26
	110	64	61	54	48	43	38	34	30	28	25
	120	60	58	52	47	41	36	32	29	26	24
	130	57	56	50	44	39	34	31	28	25	23
	140	54	54	48	41	36	32	29	27	24	23
	150	49	49	44	39	34	31	28	25	23	22
	160	44	44	41	36	32	29	26	24	23	21
Category D	100	64	61	54	48	44	38	34	30	28	25
	105	62	60	53	48	42	37	33	30	27	25
	110	60	58	52	47	41	36	32	29	27	24
	120	56	56	50	44	38	34	31	28	25	23
	130	53	53	47	41	36	32	29	26	24	23
	140	48	48	43	38	34	30	28	25	23	22
	150	42	42	40	35	32	29	26	24	22	21
	160	37	37	37	33	29	27	25	23	21	20
	170	34	34	34	30	28	25	23	22	20	19

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable tension, compression, and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67.5"

Rail Spans for IronRidge Series XR10 Roof Mount for use with QMHSS Products

Table 5A		Roof Height:	0-30 ft		Panel Orientation:	Portrait					
		Roof Angle:	27 < θ ≤ 45		degrees						
		Roof Wind Zone:	2								
XR10 Rail	Wind Speed	Ground Snow Load									
Exposure	mph	0 psf	10 psf	20 psf	30 psf	40 psf	50 psf	60 psf	70 psf	80 psf	90 psf
Category B	100	72	66	57	51	45	41	38	35	33	30
	105	72	66	57	51	45	41	38	35	33	30
	110	71	65	57	50	45	41	38	35	33	30
	120	67	63	55	49	45	41	38	35	32	29
	130	64	61	54	48	44	41	38	34	31	28
	140	60	59	52	47	43	40	36	33	30	27
	150	56	56	51	46	43	39	35	32	29	27
	160	53	53	49	45	42	37	33	30	28	26
Category C	100	68	63	55	50	45	41	38	35	32	29
	105	66	62	54	49	45	41	38	35	31	29
	110	64	61	54	48	44	41	38	34	31	28
	120	59	58	52	47	43	40	36	33	30	27
	130	55	55	50	46	42	38	34	31	29	26
	140	51	51	48	44	41	36	33	30	27	25
	150	48	48	47	43	38	34	31	28	26	24
	160	45	45	45	40	36	32	30	27	25	23
Category D	100	64	61	54	48	44	41	38	34	31	28
	105	62	60	53	48	44	41	37	33	30	28
	110	59	58	52	47	43	40	36	33	30	27
	120	55	55	50	46	42	38	34	31	28	26
	130	51	51	48	44	40	36	32	30	27	25
	140	47	47	46	42	38	34	31	28	26	24
	150	44	44	44	39	35	32	29	27	25	23
	160	42	42	41	37	33	30	28	25	24	22
	170	38	38	38	34	31	28	26	24	23	21

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable tension, compression, and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67.5"

Rail Spans for IronRidge Series XR10 Roof Mount for use with QMHLS Products

Table 5B		Roof Height: 0-30 ft		Panel Orientation: Portrait							
		Roof Angle: $27 < \theta \leq 45$ degrees									
		Roof Wind Zone: 2									
XR10 Rail	Wind Speed	Ground Snow Load									
Exposure	mph	0 psf	10 psf	20 psf	30 psf	40 psf	50 psf	60 psf	70 psf	80 psf	90 psf
Category B	100	72	66	57	51	45	41	37	33	30	27
	105	72	66	57	51	45	41	37	33	30	27
	110	71	65	57	50	45	41	36	32	29	27
	120	67	63	55	49	45	40	35	31	28	26
	130	64	61	54	48	43	38	34	30	28	25
	140	60	59	52	47	41	36	32	29	27	24
	150	56	56	51	45	39	35	31	28	26	24
	160	53	53	49	43	37	33	30	27	25	23
Category C	100	68	63	55	50	45	40	35	31	28	26
	105	66	62	54	49	45	39	34	31	28	26
	110	64	61	54	48	43	38	34	30	28	25
	120	59	58	52	47	41	36	32	29	26	24
	130	55	55	50	44	39	34	31	28	25	23
	140	51	51	48	41	36	32	29	27	24	23
	150	48	48	44	39	34	31	28	25	23	22
	160	44	44	41	36	32	29	26	24	23	21
Category D	100	64	61	54	48	44	38	34	30	28	25
	105	62	60	53	48	42	37	33	30	27	25
	110	59	58	52	47	41	36	32	29	27	24
	120	55	55	50	44	38	34	31	28	25	23
	130	51	51	47	41	36	32	29	26	24	23
	140	47	47	43	38	34	30	28	25	23	22
	150	42	42	40	35	32	29	26	24	22	21
	160	37	37	37	33	29	27	25	23	21	20
	170	34	34	34	30	28	25	23	22	20	19

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable tension, compression, and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67.5"

Rail Spans for IronRidge Series XR10 Roof Mount for use with QMHSS Products

Table 6A		Roof Height: 0-30 ft		Panel Orientation: Portrait							
		Roof Angle: $27 < \theta \leq 45$ degrees									
		Roof Wind Zone: 3									
XR10 Rail	Wind Speed	Ground Snow Load									
Exposure	mph	0 psf	10 psf	20 psf	30 psf	40 psf	50 psf	60 psf	70 psf	80 psf	90 psf
Category B	100	72	66	57	51	45	41	38	35	33	30
	105	72	66	57	51	45	41	38	35	33	30
	110	71	65	57	50	45	41	38	35	33	30
	120	67	63	55	49	45	41	38	35	32	29
	130	64	61	54	48	44	41	38	34	31	28
	140	60	59	52	47	43	40	36	33	30	27
	150	56	56	51	46	43	39	35	32	29	27
	160	53	53	49	45	42	37	33	30	28	26
Category C	100	68	63	55	50	45	41	38	35	32	29
	105	66	62	54	49	45	41	38	35	31	29
	110	64	61	54	48	44	41	38	34	31	28
	120	59	58	52	47	43	40	36	33	30	27
	130	55	55	50	46	42	38	34	31	29	26
	140	51	51	48	44	41	36	33	30	27	25
	150	48	48	47	43	38	34	31	28	26	24
	160	45	45	45	40	36	32	30	27	25	23
Category D	100	64	61	54	48	44	41	38	34	31	28
	105	62	60	53	48	44	41	37	33	30	28
	110	59	58	52	47	43	40	36	33	30	27
	120	55	55	50	46	42	38	34	31	28	26
	130	51	51	48	44	40	36	32	30	27	25
	140	47	47	46	42	38	34	31	28	26	24
	150	44	44	44	39	35	32	29	27	25	23
	160	42	42	41	37	33	30	28	25	24	22
	170	38	38	38	34	31	28	26	24	23	21

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable tension, compression, and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67.5"

Rail Spans for IronRidge Series XR10 Roof Mount for use with QMHLS Products

Table 6B		Roof Height: 0-30 ft		Panel Orientation: Portrait							
		Roof Angle: $27 < \theta \leq 45$ degrees									
		Roof Wind Zone: 3									
XR10 Rail	Wind Speed	Ground Snow Load									
Exposure	mph	0 psf	10 psf	20 psf	30 psf	40 psf	50 psf	60 psf	70 psf	80 psf	90 psf
Category B	100	72	66	57	51	45	41	37	33	30	27
	105	72	66	57	51	45	41	37	33	30	27
	110	71	65	57	50	45	41	36	32	29	27
	120	67	63	55	49	45	40	35	31	28	26
	130	64	61	54	48	43	38	34	30	28	25
	140	60	59	52	47	41	36	32	29	27	24
	150	56	56	51	45	39	35	31	28	26	24
	160	53	53	49	43	37	33	30	27	25	23
Category C	100	68	63	55	50	45	40	35	31	28	26
	105	66	62	54	49	45	39	34	31	28	26
	110	64	61	54	48	43	38	34	30	28	25
	120	59	58	52	47	41	36	32	29	26	24
	130	55	55	50	44	39	34	31	28	25	23
	140	51	51	48	41	36	32	29	27	24	23
	150	48	48	44	39	34	31	28	25	23	22
	160	44	44	41	36	32	29	26	24	23	21
Category D	100	64	61	54	48	44	38	34	30	28	25
	105	62	60	53	48	42	37	33	30	27	25
	110	59	58	52	47	41	36	32	29	27	24
	120	55	55	50	44	38	34	31	28	25	23
	130	51	51	47	41	36	32	29	26	24	23
	140	47	47	43	38	34	30	28	25	23	22
	150	42	42	40	35	32	29	26	24	22	21
	160	37	37	37	33	29	27	25	23	21	20
	170	34	34	34	30	28	25	23	22	20	19

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable tension, compression, and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67.5"